We Claim:

1. A set of at least two masks for the projection of structure patterns, each structure pattern being formed on the masks and coordinated with one another by a projection system into the same photosensitive layer arranged on a semiconductor wafer, the projection system having a resolution limit for a lateral dimension of an opening projected onto the semiconductor wafer from a mask, comprising:

a first mask, the first mask having a semitransparent or nontransparent first layer, which is arranged on a first substrate and in which at least one first opening is formed at a first position, the first opening having a first lateral dimension, which is greater than the resolution limit; and

a second mask assigned to the first mask, the second mask having a semitransparent or nontransparent second layer, which is arranged on a second substrate and in which at least one dummy structure assigned to the first opening is formed at a second position, the dummy structure having a second lateral dimension, which is smaller than the resolution limit of the projection system wherein the first position on the first mask is identical to the second position on the second mask.

2. The set of masks as claimed in claim 1, wherein the first mask is a chromeless phase mask.

3. The set of masks as claimed in claim 2, wherein the second mask is a trimming mask having at least one further opening for the exposure of a region in the photosensitive layer, which arises on account of a phase conflict in the case of an exposure with the first mask.

4. The set of masks as claimed in claim 1, wherein the first mask is a trimming mask for the exposure of a resist structure in the photosensitive layer, which arises on account of a phase conflict in the case of an exposure with the second mask and the second mask is an alternating phase mask.

5. The set of masks as claimed in claim 1, wherein the first opening, a second opening, and at least one third opening are arranged as gaps in a periodic line-gap pattern on the first mask.

6. The set of masks as claimed in claim 5, wherein the first, second, and at least third opening, as gaps, are separated from one another by first, second and third webs formed by the semitransparent or nontransparent first layer, the first, second, and at least third opening case have the same first lateral dimension, the first, second and third web each case have an identical third lateral dimension, and the first and the third lateral dimension are different from one another.

7. The set of masks as claimed in claim 6, wherein the first, second, and at least third opening are in each case assigned a dummy structure, the position of the first, second and at least third opening on the first mask each being identical to that position of the dummy structure assigned thereto on the second mask.

8. The set of masks as claimed in claim 1, wherein at least one further transparent opening is formed at a further first position on the first mask, and at least one

semitransparent region is arranged at a further second position on the second mask, the further second position corresponding to the further first position on the first mask.

9. A method for producing a set of at least two masks comprising:

a) prescribing an electronically stored first data representation of the first mask with a first opening at a first position on the first mask;

b) prescribing at least one set of exposure parameters of a projection system and, parameters of an illumination system, the parameters including a wavelength of the light used for the projection of at least one second mask into a photosensitive layer on a semiconductor wafer in the projection system, and a numerical aperture;

c) calculating a resolution limit for the lateral dimension of an opening that can be optically resolved by the projection system on the second mask from the values of the prescribed exposure parameters;

d) prescribing a second data representation of the second mask with a dummy structure at a second position on the second mask, which second position corresponds to the first position on the first mask, the dummy structure having a second lateral dimension, which is smaller than the resolution limit for the exposure parameters of the second mask;

e) prescribing a first focus setting of the projection system;

f) simulating the image of the first opening and the dummy structure in the photosensitive layer on the semiconductor wafer by the first and the second data representation on the basis of the prescribed exposure parameters and the focus setting;

g) determining the lateral dimension of the simulated image from a superposition of the images of the first opening and the dummy in the photosensitive

layer;

h) repeating steps e) to g) for at least two further focus settings, which are different from one another, for determining the lateral dimension of the simulated image as a function of the focus settings;

i) prescribing a limit value for a depth of field range of the imaging;

j) determining the depth of field range of the imaging from the function;

k) comparing the depth of field range determined with the limit value;

l) depending on the comparison result, adapting the second lateral dimension of the dummy structure in the second data representation of the second mask; and

m) electronically storing the second data representation of the second mask.

10. The method as claimed in claim 9, wherein a line width adaptation of the first opening is carried out depending on the adaptation of the second lateral dimension.

11. The method as claimed in claim 9, wherein a further opening is prescribed in the second data representation of the second mask, the further opening in the second data representation is assigned a further dummy structure in the first data representation of the first mask, and repeating steps e) to m) for adapting a lateral dimension of the further dummy structure on the first mask.

12. The method as claimed in claim 9, wherein the first mask is one of a

chromeless, an alternating, a halftone, a tritone, phase mask or a chrome mask.

13. The set of masks as claimed in claim 1, wherein the first mask is an alternating phase mask.

14. The set of masks as claimed in claim 13, wherein the second mask is a trimming mask having at least one further opening for the exposure of a region in the photosensitive layer, which arises on account of a phase conflict in the case of an exposure with the first mask.

15. The set of masks as claimed in claim 1, wherein the first mask is a trimming mask for the exposure of a resist structure in the photosensitive layer, which arises on account of a phase conflict in the case of an exposure with the second mask and the second mask is a chromeless phase mask.